DEVOTED TO AGRICULTURE AND ALL ITS KINDRED ARTS AND SCIENCES.

Agriculture not only gives riches to a nation, but the only riches she can call her own.—JOHNSON.

VOL. II. SATURDAY, FEBRUARY 2, 1850. NO. 3.

S. W. COLE, EDITOR. QUINCY HALL, BOSTON. J. NOURSE, PROPRIETOR.

AGRICULTURAL EDUCATION.

AT the agricultural meeting at the State House, on Tuesday evening, Jan. 15th, Mr. Calhoun in the chair, the above subject was discussed, in connection with legislative action.

Rev. Mr. Barry, of Hanover, opened the discussion in a rather lengthy and elaborate address, that would have done credit to an orator at a farmers' annual festival. He spoke of the great importance of agriculture, and the high estimation in which it had been held in various parts and in different ages of the world, and the attention which it had received from the greatest statesmen, and the most distinguished men in scientific and other pursuits. The establishment of agricultural schools in other countries, and the great call for information in our own, as evinced by the large number of agricultural papers in circulation, and various books, and other means of instruction, were urged as arguments in favor of agricultural schools, to satisfy the increasing demand for useful knowledge. The address was very able, and showed deep research and close observation.

Hon. Mr. Daggett remarked, that Massachusetts took the lead in all the great enterprises of the day; that the time had come for the establishment of an agricultural school, and he was ready for action on the subject.

Mr. Breck, of Brighton, was in favor of an agricultural school. There would be scholars enough to fill such a school; it should be located in the interior, in a retired situation, with a farm of two hundred and fifty acres. He mentioned various studies that should be pursued. The plan should be extensive; but a beginning might be made in a small way, and the outline filled up afterwards. Manual labor should be practised as a means of information, rather than for support.

Mr. Jenks, of Boston, had long been in favor of agricultural education. Young farmers need training for their profession.

Mr. French, of Braintree, said that our people are ready to receive instruction. This is shown by the great gathering here to night. He spoke of the improved state of agriculture in Europe, and the advantages from agricultural schools and model farms. Massachusetts has been first in many useful enterprises, and she ought to take the lead in this subject. Many wealthy men will give liberally to an agricultural institution, when begun aright.

Mr. Merriam, of Tewksbury, spoke of many great things which Massachusetts had done, and the importance of her taking the lead in agricultural education.

Mr. Gorham Brooks, of Medford, spoke of the course which the state had pursued in encouraging agriculture, by offering bounties on crows, foxes, and on raising wheat, all of which had done no good. Far better would it have been, to spend the money for the establishment of agricultural schools. But in this, we should commence on a small scale; and when the people see that a little money is well expended, they will be liberal in supplying what is wanted. His sensible remarks were listened to with great attention.

A very large number of gentlemen attended this meeting—the hall was nearly full.

January 22d, the same subject was discussed.

Mr. Cole, of the N. E. Farmer, said that for years there had been much talk in our meetings about agricultural education, and now it was high time to take some action on the subject. Some had doubts as to the success of the plan; but there was no more difficulty in teaching the sciences that are connected with agriculture, than in teaching other sciences, and branches of literature that fit men for other professions. And with a model farm, connected with an agricultural institution, under a good practical farmer, students could be instructed in the practice of agriculture also, and the application of the sciences to this art. But, although he was decidedly in favor of an agricultural school, he would have suitable books prepared, and have the elementary principles of the sciences appertaining to agriculture taught in our common schools, that the great mass of the people might be instructed. As academies and colleges would do but little for general instruction, or only prepare a few to govern the whole, so agricultural schools would effect but little for general instruction. There was no more propriety in sending boys to agri-

cultural schools to learn the elements of the sciences, than in sending them to college to learn A B C. Agricultural seminaries should be commenced on a moderate scale — then an imperfection in the plan could be corrected without much loss; but if begun on an expensive scale, any defects in the plan might occasion great loss, and finally defeat the whole design for a long time.

Mr. Jenks, of Boston, was in favor of agricultural education in common schools, but this would not supersede agricultural schools. He said that there should be agricultural schools for training teachers for our common schools, that they might give proper instruction to their pupils. In Ireland there are thirteen schools for this purpose. Mr. Jenks presented statistics showing the claims of the farming interest upon the state — as large sums had been expended in various institutions for the purpose of preparing men for other pursuits, but nothing had been done to educate farmers, and comparatively but a small amount for the encouragement of agriculture.

Hon. M. P. Wilder rejoiced to see the subject taken up in earnest. He considered agriculture as susceptible of improvements as manufactures or the mechanic arts. He thought it was time to begin, and he would cheerfully coöperate with those who feel an interest in the subject. He thought the science of agriculture ought to be taught in our common schools; yet we should have an agricultural institution, and some feasible plan should be prepared and presented to the legislature.

Mr. Asa G. Sheldon, of Wilmington, alluded to the improvements that had been made in agriculture for forty years past, and the improved education of females; but he thought that education which fitted them for good housewives had been neglected. And if an agricultural school was established, he hoped that while the boys were learning how to manage the farm, girls would be taught to manage household affairs. He said that he never knew a farmer to succeed well, unless he had a wife who could manage well. He considered industry in females necessary for their health. The great men of our country had industrious mothers. The seats in this hall are filled with men whose mothers were accustomed to labor; but if so great a change takes place in twenty-five years to come as has been made the twenty-five years past, as to female education and fashions, not only these seats, but those of Congress, and perhaps even that of the office of President, will be filled in the next century by those born of Irish women. Not one Yankee girl in ten is now educated so as to be able to manage a farmer's house. The farmer likes music, but if he comes from his field for his dinner, and finds it is not ready, and the fire has gone out under the pot, and the children crying, the sound of the organ will be a torment to him.

Mr. Merriam suggested that an agricultural school should be established on a farm of three or four hundred acres, which should be divided into different departments for farming and gardening, and that different breeds of animals should be procured.

Hon. J. C. Gray thought that those brought up on farms had much less need of instruction than others who had paid no attention to the subject. He thought it was best to begin on a moderate scale, and when the fruits of an agricultural school were seen, there would be no trouble in getting aid. He thought that such an institution might be connected with some of our present literary seminaries.

Mr. Elmer Brigham, of Westborough, thought, from what had been said, that an agricultural institution was designed for the sons of those who live in cities, but he thought that it should be conducted on economical principles, so that the sons of the laboring classes could have an opportunity to get agricultural instruction at a small expense.

Mr. Cole thought the state should provide elementary books on the sciences connected with agriculture for our common schools, and prevent the changes now so common in school books. These elementary studies would give great encouragement to higher agricultural institutions. He thought an agricultural college should be entirely distinct from all other institutions, and the studies should be only those that conduce to agricultural improvement, and of a useful character.

Rev. Mr. Barry, of Hanover, alluded to the success of agricultural schools in other countries, and he argued that they would be still more useful in this country, where farmers were owners of the soil.

Mr. Wilder alluded to the lectures which Professor Johnston is now delivering before the N. Y. State Ag. Society, at Albany, and he hoped that he might be engaged to deliver a course of lectures before these meetings.

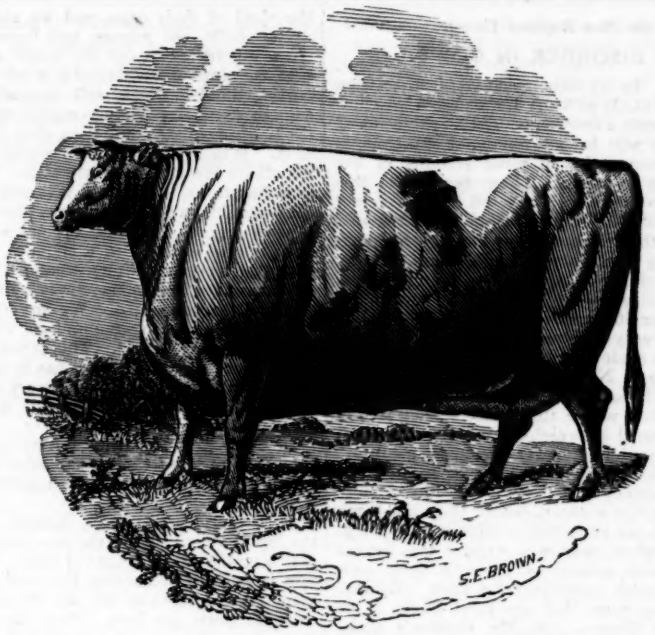
Same subject continued.

LARGE CROP OF CORN.

Mr. R. W. Turner, Newton Centre, gives the following account of a crop of corn which he raised the past season. There was one acre and one hundred and forty-four rods of land. The produce was four hundred and twenty-four heaping bushels of ears. He thought that two bushels of ears would make one bushel of shelled corn. He says that this land was once a mud hole. He drained it, sowed it to grass, mowed it two years. He manured one half with compost, spread on; the other half with green manure in the hill. The corn was as stout where it was manured in the hill. The rows were three and a half feet apart, and the hills two feet apart.

CONVENTION OF FOWL BREEDERS.

The Committee who superintended the late fowl exhibition, have given notice that a public meeting will be held, at the Representatives' Hall, on Tuesday evening, February 12th, at 7 o'clock, for the purposes of hearing the report of the Committee, and forming a permanent association. It is hoped that all who take an interest in the promotion of so useful an object will be present, and aid in the proceedings.



SHORT HORN DURHAM HEIFER.

This engraving represents the prize heifer exhibited at the Christmas Club Show, at Smithfield Market, London, in December, 1843. This annual show is much the largest and best of fat cattle in the United Kingdom. To this heifer were awarded all the first prizes of that show: — £20, as the best cow of her class; the gold medal, as the best fat beast at the show; and a silver medal, to her breeder. &c., Sir C. R. Tempest.

This heifer was four years and nine months old. Her dead weight was one thousand seven hundred and seventy pounds. She produced two hundred and twenty-eight pounds of loose fat, which is included in her dead weight. Our engraving has been made by Brown, from a drawing taken from a cast which may be seen in our office — a *fac simile* of the original.

THE WORLD'S FAIR.

Among the great schemes that have resulted from steam navigation and travelling, is that grand plan for a monster exhibition, or the World's Fair, to be held in London in 1851. A few years ago, such a proposition would have been ridiculed as the height of folly, and an attempt would have resulted in a splendid failure. But now such are the advantages for rapid travelling by steam, that a person in the interior of this great country can go to its shores, and then cross the vast ocean of several thousands of miles in extent, and appear at the place of that great exhibition in the short space of two or three weeks; and on this rapidity of travelling is founded the fair prospect of so magnificent a scheme as the world's exhibition.

All nations are invited to bring to this show the products of their industry, taste, and ingenuity, from the raw material and the rudest, coarsest fabric, to the finest and most delicate specimen of fine taste and skill; from the simplest and smallest productions of art, to the most gigantic and complicated machinery.

Prince Albert has consented to take the presidency of this great enterprise. It is proposed to erect a fabric for the purpose, one mile in extent. The sum necessary to be raised is estimated at half a million of dollars. Prizes from five hundred pounds down to twenty pounds will be awarded.

At a meeting of the Executive Committee of the N. Y. S. A. Society, the Secretary read the following extract from a letter from James Cowden, Esq., American Consul at Glasgow: — "Since my letter to you of the 19th Oct., Prince Albert has come out with a proposition (under the patronage of the Queen) for a great fair or exhibition of the '*Industry of all Nations*,' to be held in London in the summer of 1851, to which I beg to draw your attention. It will be found in the Glasgow Chronicle, which I forward you. I am quite sure there is no nation on the face of the globe that can outdo the Americans in any thing they undertake. Sufficient time is allowed ere the proposed exhibition is to come off, to enable our ingenious mechanics to bring forth something worthy of our noble and beloved country, and secure to themselves a handsome reward, if successful competitors; as the prizes are to be one *money* prize, £2000 sterling, equal to near $10,000; and four £1000 prizes sterling, equal to $5000 each. If this be made generally known, (and no institution can so effectually do it as that with which you are connected,) I cannot doubt the United States will exhibit some of its exquisite Yankee notions, which will prove useful and ornamental at the 'Great Fair of all Nations.'"

For the New England Farmer.

BONE DISORDER IN COWS.

Mr. Editor: In my former communication upon this subject, (Vol. I. p. 389,) I attempted to show that there was such a disease, caused by the want of proper food. It will be my object, at this time, to show why it may exist in some sections of the country, and not in others. Those farmers, in this town, whose cows have been affected by it, have not been in the habit of raising stock, but they have sold their calves to the butcher. The farmer who keeps ten cows, usually sells annually eight calves. These, at five weeks old, will weigh one hundred and twenty-five pounds each. Where this course has been pursued for fifty years, there have been taken from the soil twenty-five tons of animal matter, and but small return made to it by the manure voided by calves at this age. Now it will be obvious to every one that this will sooner exhaust the animal matter from the soil, than where they raise stock; for the ox that is kept until he weighs as much as the eight calves, will have voided a larger amount of manure.

It is the practice of most farmers here to purchase heifers that are driven from New Hampshire, Maine, and Vermont, in the autumn, before they are three years old, which are expected to calve in the spring. This is a time when they will require the largest amount of animal matter to promote their own growth, and furnish nutriment for their offspring. It is these young cows that are most likely to be affected by this disease. On Mr. Preston's farm, alluded to in my last communication, for fifteen years before they began to use bone-meal, they were not able to keep any of these until they were six years old. They became so stiff and feeble that they were obliged to dry them. Many of them were driven to New Hampshire to a pasture that has always been used for fattening cattle. There they fatted as well as cows that had never been diseased.

I will give my reason why I think that this disease has not shown itself any more in Hamilton; — yet I think I have seen some signs of it there. When I see the boards about the cow-yard look as if the cows had been trying to eat them up, it is a sure sign of one form of this disease. The farmers in that town are in the habit of using a considerable quantity of hay from the salt marshes of Ipswich and Essex. I have never seen any analysis of this grass; but, from the large quantity of lime in the shells of clams and muscles, found about these marshes, the inference is that it contains a large amount of phosphate of lime.

The pastures there may be as much exhausted of animal matter as here; yet if a cow has had a full supply of it during the winter, she will be able to go through the summer without showing the want of it. It is the opinion of some there, that the manure made from salt hay is better than that made when the cattle are fed upon English hay. The inference from this is, that it furnishes something to the soil, which the other does not.

It is the practice of many there to keep a portion of their best salt hay until the time the cows go to pasture. They will often eat it then, when they will not eat the best of English hay.

If I am correct in supposing that it contains more lime, it shows that they were giving it to their cows at the very time they most needed it to prevent this disease.

It may not be, that those farms which have been cultivated the longest are most exhausted of animal matter. It depends more upon the manner of cultivation than upon the time.

Perhaps we may apply the same principle to feeding milch cows, that we act upon in feeding hens. When we see them trying to eat the lime from the walls of their coop, we think they need it to form the shell of their eggs, and we give it to them in oyster-shells, old mortar, and bones. So when we see a cow trying to eat old bones, we should think that she needs something of this sort to furnish milk.

Hens that have been well supplied with lime have enough in their system to enable them to form the shells of eggs for several days after they are deprived of it. When the ground is covered with snow they sometimes lay eggs without shells. This is the same as saying to us, — "If you will only furnish us with the materials, we will give you the eggs." Thus it is with a good cow that has not a supply of lime. She gives us so much of it in milk, that she has not enough to supply her own wants.

The same principle may apply here, as we act upon in regard to an orchard. We are often told that it is not well to plant a young orchard where an old one has just been removed. This is not because the soil has become so poor; but it has become deprived of the particular ingredients necessary for a young tree. If we supply this, the tree will do as well as the former one did.

In every instance where I have seen this disease, they have pursued that course which would be most likely to exhaust the animal matter necessary for a milch cow.

In Doctor Dana's Muck Manual, it is stated that the liquid evacuation of the cow contains a considerable quantity of phosphate of lime. When no attention is paid to preserving this, and the solid excrements are exposed to the air, the most volatile and valuable parts are lost. From this we may infer that where there is a barn-cellar for preserving the manure, the cows will not be so likely to have this disease, and experience will warrant the conclusion.

It is there stated also that peat-ashes abound in phosphate of lime. If our peat-meadows are reclaimed and cultivated, the hay which they produce then will probably contain more phosphate than that which grows upon them in their natural state. Cows that are fed upon hay that grew upon reclaimed meadows will not be affected by this disorder.

By carting muck to our barn-cellars, to be wet by the evacuations of the cows, we not only increase our manure, but it will abound in that particular ingredient which the soil needs to produce proper food for milch cows.

I think I can give an instance showing the beneficial results of muck in this respect. The farm of Mr. Joseph Putnam is near to Mr. Preston's. This has been for the last fifty years as much of a dairy-farm as any in this neighborhood; yet his cows have not been affected by this disorder. He has never brought much manure on to his farm, but he has annually carted a large quantity of muck into his hog-pen and cow-yard; so that, twenty-five years ago, his meadow mud-manure had become proverbial in this neighborhood. Now cows, that are fed upon grass that grows upon land which has been manured with this compost, will not be so apt to have this disorder, as where nothing but the solid excrements of the cow had been applied to the soil.

When I began, I intended to say something about this disorder where I have seen it in other places; but I have already trespassed too much upon your patience. WILLIAM R. PUTNAM.

North Danvers, *Dec.* 28.

Remarks. — The term *animal matter* is used by our correspondent in reference to the phosphate of lime, or bone-earth, which enters into the composition of the animal's bones. Before their formation, the materials may be called *mineral matter*; but after forming a part of the creature, they are animal matter, as much so as the flesh, horns, or hoofs.

These substances, in their elementary state, being minerals, they are not liable to evaporation, but they remain with the permanent parts of the liquid manure. On boiling this manure, or exposing it to heat, and consequent fermentation, the aqueous parts would escape in steam or vapor, and the volatile matters in gases, leaving the salts and other solid parts. — Ed.

For the New England Farmer.

HISTORY OF AGRICULTURE. NO. IV.

[CONCLUDED.]

Mr. Editor: — The soil of South America is rich and productive, but the bowels of the earth are stored with the precious metals; hence agriculture is generally neglected. The people are many years behind the times, both as it regards the implements of husbandry, and the mode of subduing the soil. But the United States were destined to happier scenes of action. Our fathers pushed the buisness of agriculture with nerve, resolution, and unexampled success. The forest fell before them, and the country soon began to smile, and promised what a more distant day has brought forth. While every other art and science is cultivated, that of agriculture has by no means been neglected. The different modes of subduing and cultivating the soil have, within a few years, engaged the attention of men of wealth and leisure. Many valuable publications have been diffused over our country, from which much valuable and useful information has been drawn. But in the agriculture of this country many improvements are still to be made. Many of our farmers blindly follow in the footsteps of their fathers, without deriving any benefit from reading, reflection, or experiment; and we frequently hear them complain that their agricultural labors are severe, and their crops small.

This is in some degree true; but its truth arises principally from the fact that they cultivate too much land to render agriculture profitable. I speak in relation to the means which they employ for fertilizing their land. Much may be done without the aid of manure; but the use of this article is the most ready and efficient mode of rendering the cultivation of the earth profitable. Instead, however, of increasing this article by compost, many farmers misapply that which is incidental to their farms. They are too apt to spread a small quantity of manure upon a large piece of poor land. The manure, in this case, is almost entirely lost, inasmuch as it remains in an inactive state. There is not a sufficient quantity to give an impetus to the cold and barren earth with which it is mixed. This is one great cause of poor crops; and the great surface over which the labor of the husbandman is spread, is the principal ground of excessive labor of which he complains. The farmer should only plough as much land as he can highly manure; then his labors would be comparatively light, his crops large, and his land constantly improving. By this mode of proceeding, the crops would not exhaust the land; and the quantity of manure upon it beyond what is necessary to the production of the crops, would, by its fermentation, fertilize, and render of the nature of compost the whole cultivated surface. Such land may, with a trifling expense, be kept very rich. Whilst this process is operating upon a part of the poor lands of a farm, the residue of them may lie fallow, or be fertilized by ploughing in such green crops as may be produced upon a lean soil. The means of enriching land are numerous, which are within the reach of every farmer. A little reflection upon the most common principles of philosophy will point them out. Different soils, and different manures, and different crops, must all be connected according to their respective and relative natures. Farmers should consult the nature and character of their farms, and regulate their tillage accordingly; and they should also remember that husbandry, of all arts, is the most improvable.

ROCKINGHAM.

For the New England Farmer.

"CONVERSATIONAL MEETINGS."

Mr. Editor: — On page 344, Vol. I., of the N. E. Farmer, is an article, which doubtless interested many of your readers. That farmers should meet together, and discourse topics which belong to their vocation, is a subject of great magnitude and importance; and we have often urged the formation of a "Farmers' Club" in this place, but our labors have ever proved unsuccessful; and we now take this way of again introducing "the plan of creating public sentiment by means of popular assemblies." I believe there is such a union of feeling or spirit existing here relative to this object, that a speedy organization might be made. Who will throw the "first brick," or coöperate in bringing about such an enterprise?

Where is there a farmer in New England that does not reverence with hallowed emotions the land of his birth, as well as his highly honored vocation? That venerable band of "faithful few" who landed upon "Plymouth Rock," held this, their chief employment — subduing a wilderness — in high estimation; and they and their descendants have transmitted from generation to generation — yea, down even to the latest posterity — this, a noble gift or token for remembrance, — "a fruitful field." Say Morse and Parish, in their early history of New England, in speaking of the "character of first settlers," "They were destined to plant and subdue a wilderness, filled with savage enemies; to lay the foundation of a great empire, under the jealous eye of their parent country." Thus we see the manifest zeal or interest taken in the cultivation of the soil; and in order to give efficacy to their enterprise, or to coöperate in helping each other, so that all might stand on "equal footing," tradition says they found it necessary to congregate, or assemble together, that they might consult their best interest. We have it from oral account, that these meetings were generally held under the broad canopy of heaven beneath the shady boughs of some large and stately tree.

Would that such was the practice now, in all farming communities! What benefit, what vast amount of knowledge, might be derived from such means! Again we ask, Who will coöperate with us in bringing about this desirable enterprise?

Woburn, *Jan.*, 1850. D. W. J.

For the New England Farmer.

HOUSE LAMBS.

Mr. Cole: — Being a reader of the New England Farmer, I have often acquired new and useful information on various subjects of agriculture and rural economy. You have given us articles on breeding, rearing, and fattening neat cattle, sheep, and swine. But there is one subject which I have not seen noticed in your paper, or in your bountifully supplied markets. I mean *house lambs*, for which, if you advert to the prices of meat in the provision market of London, and other cities of Great Britain, you will find, at this season of the year and the two following months, the prices generally quoted.

I will admit that it is an article of luxury and of rather limited use; yet that does not preclude you from giving it a passing notice. As I have been particularly acquainted with this branch of rural econ-

omy, and have observed the results of others in the same branch, I will make a few remarks on the subject, with the results of my experience, which was in England.

Some few years since, in my farming operations, I purchased twenty ewes of the Dorset or Somerset breed, about the first of October, which cost about $12 per head. I fed them on rowen; and about one month after, the lambs began to come. They were allowed to run with the dams about two days, and then I provided a pen for them in an outhouse. The pen for the lambs, from this number of ewes, was ten feet by six or eight, raised about one foot above the ground. The floor was made of strips, one and one half inches wide, with spaces between just wide enough to allow the urine to escape, and not allow the lambs' feet to pass through. A little straw was spread over the floor, and changed daily. As the lambs were dropped, they were confined to the pen, as soon as they were strong enough. The dams were allowed to come and nurse them at seven o'clock in the morning, at noon, and again at evening; and so on, in rotation, as fast as the lambs came. In a few days the ewes will get habituated to this course, and usually feed till sucking time, and then come when called. A small lump of chalk should be put into the pen, and a little wheat or rye flour, in troughs, for them to lick, which they will do with avidity. The chalk serves to correct acidity in the stomach, and it is very good to give to young calves. The benefit arising from it is very great.

I have sold lambs, at seven or eight weeks old, whose weight per quarter was from seven to eight pounds, — an average of from twenty-eight to thirty pounds, — at one shilling and sixpence sterling per pound, which was ten to twelve dollars for each lamb. If I recollect, I sold the produce of nineteen of these ewes before the first of April. I think it was twenty-nine lambs, as more than half of the sheep had twins. And the net amount received was nearly equal to the fifty pounds sterling paid for the sheep. As the season advances, though the lambs may be made heavier, the price recedes. Some allow the ewes to associate with the buck again in two or three weeks from yeaning, a propensity for which this breed is proverbial, — and thus obtain a second produce the same year. But this practice is not an economical one, as it reduces the value of the dams; for they will not recover, so as to fatten during the coming season. The practice usually pursued is to fit the ewes, which the lambs leave so early, for the market soon after shearing. The only breed of sheep adapted to this mode is the Dorset or Somerset.

For the New England Farmer.

DITCHING.

Mr. Editor: — One year has passed away since I made my last communication on ditching, Vol. I., p. 2. Since that time, I have had an opportunity of witnessing the effects of my effort to improve fresh meadow through draining. Before I commenced, many parts of the meadow were so wet and swimming that all of the hay was removed by hand labor, with poles; and the quality of fodder was bad, by being constantly wet. Since I made the drains or ditches, the swimming or floating has ceased, and the meadow has become fine and dry; so that in most cases, I was able to go on with a cart with wide-rimmed wheels, drawn by oxen, and to carry from fifteen hundred to a ton of hay at a time; which was never done before. The quality of fodder is much better, equal to interval fodder. The quantity is not so great, but a new kind of grass is coming in, which I think, in a short time, will make the fodder worth twice as much as it was before draining. So far, the experiment has more than answered my expectation.

Before I drained the meadows, it was impossible to travel on them, without going into the wet ancle deep; but since draining, I can walk any where with shoes on, without the least danger of wetting my feet; and in summer and autumn, they are perfectly dry. Cranberries, also, are better than they were before, and less liable to be injured by frost.

I have no doubt that most of my meadows, in a short time, will be suitable to cultivate, as the mud proves to be only from two to four feet deep, and of the best kind of peat. If so, I shall have from thirty to forty acres of the best interval land for grass and vegetables, which will be worth six times as much as the high land that has been cultivated for the last century, and needs a larger quantity of manure to obtain decent crops. You shall hear from me in 1851, if we are in this mundane sphere then.

Yours respectfully,

S. A. SHURTLEFF.

Spring Grove, *Jan.*, 1850.

For the New England Farmer.

PROFIT OF HENS.

Mr. Editor: — The interesting communication of Mr. C. B. Ayer of Preston, Conn., contains a very important query, and one which I would wish to see satisfactorily solved; but the premises are defective, in so far as no statement is given concerning what breed of fowls Mr. Ayer possesses. It is well known that some varieties have a quality of protracted laying much beyond others, which compels a general, instead of a special answer to his query; besides, some kinds arrive much earlier at maturity than others. I refer to the inquiry — "How should I manage with my hens, in order to have them *continue* to lay through the cold season?"

The most practicable mode, that occurs to me, would be to coop up the earliest pullets of the season, after they are two months old, and keep them in durance until the middle of September, when they may be allowed full liberty. A week afterwards, they should be confined in a spacious enclosure, in company with the males from the former year's broods, and thus kept for a couple of weeks. They will shortly after begin to lay, and continue so to do — not every day, however — until the spring of next season.

The most fitting place to keep laying hens over winter is in the stable, or cattle-barn. The heat engendered by the cattle is sufficient to meet their wants.

Care should be taken that no access to the hay-rack be provided, as poultry do much damage to that article. When the weather is fine, and no snow on the ground, the stock may be allowed to go without doors an hour or two before or after meridian.

If so kept, there is no danger of mixing the laying stock with those fowls in the yard which may be barren; as the former, when about to be cooped up, will take to the barn in which they lay, and the others to roost in their usual places.

Grain, boiled and raw, for choice, and boiled potatoes, will furnish sufficient food. A box of sand, mixed with powdered oyster-shells, or lime, should be provided, and fresh water, in a shallow dish, which should be wattled across the top to prevent the hens wading or washing in it. The sand should be sufficiently plentiful to allow the hens to dust themselves in it. A box about eighteen inches deep, and two feet wide, filled about a foot high with sand, will serve the purpose. An old tea-chest is a good substitute.

The number of eggs to be expected in winter, compared with warm weather, will not amount to more than three fifths; but the difference between fourteen and twenty-two cents per dozen is to be added to the value of the winter produce, which will about equalize the receipts with those of summer.

The conditions under which the laying of hens can be protracted to the fullest natural extent, are systematic feeding, (taking care to prevent repletion,) warmth in the end of the fall and opening winter, and cleanliness in food, water, and roosting places.

I am, sir, &c.,

A FIRESIDE FARMER.

BOSTON, *Jan.* 7, 1850.

Advantages of burning land.

MAN AND THE SOIL.

BY M. GUIZOT, LATE PRIME MIMISTER OF FRANCE.

Movable property, or capital, may procure a man all the advantages of wealth; but property in land gives him much more than this. It gives him a place in the domain of the world; it unites his life with the life that animates all creation. Money is an instrument by which man can procure the satisfaction of his wants and his desires. Landed property is the establishment of man as sovereign in the midst of nature. It satisfies not only his wants and his desires, but tastes deeply implanted in his nature. For his family it creates that domestic country, called home, with all the living sympathies, and all the future hopes and projects, which people it. And whilst property in land is more consonant than any other to the nature of man, it also affords a field of activity the most favorable to his moral development — the most suited to inspire a just sentiment of his nature and his powers. In almost all the other trades or professions, whether commercial or scientific, success appears to depend solely upon himself, — on his talents, address, prudence, and vigilance. In agricultural life, man is constantly in the presence of God and of his power. Activity, talent, prudence, and vigilance, are as necessary here as elsewhere to the success of his labors; but they are no less insufficient than they are necessary. It is God who rules the seasons and the temperature, the sun and the rain, and all those phenomena of nature which determine the success or the failure of the labors of man on the soil which he cultivates. There is no pride which can resist this dependence, no address which can escape it. Nor is it only a sentiment of humility as to his power over his own destiny which is thus inculcated upon man; he learns also tranquillity and patience. He cannot flatter himself that the most ingenious invention, or the most restless activity, will insure his success: when he has done all that depends upon him for the cultivation and the fertilization of the soil, he must wait with resignation. The more profoundly we examine the situation in which man is placed by the possession and cultivation of the soil, the more do we discover how rich it is in salutary lessons to his reason, and benign influences on his character. Men do not analyze these facts, but they have an instinctive sentiment of them which powerfully contributes to that peculiar respect in which they hold property in land, and to the preponderance which that kind of property enjoys over every other. This preponderance is a natural, legitimate, and salutary fact, which, especially in a great country, society at large has a strong interest in recognizing and respecting.

ON THE NATURE OF SOILS.

An all-wise Creator, for some all-wise purposes, decreed that plants and animals should derive their subsistence from the soil; hence we find all the elements of vegetable and animated nature in the soil. For instance: in most soils we find iron abundant; then, if we look into the animal economy, we find iron in the muscles of both man and the lower orders of brute creation. And the wonder-working chemist detects nature in using the same ingredient in coloring all the fruits and flowers. All things having once been created, the making principle stopped, and a changing one immediately took its place, and has never ceased to act since mutability was indelibly stamped upon creation. In the formation of plants and animals, Nature, gradually collecting her material, slowly forms her most perfect specimens; but, like a human mechanic, inasmuch as she lacks one or more of the materials, in the same degree is the fabric imperfect. Thus we see that if the soil in the field lacks one or more ingredients in the formation of a vegetable, the plant assumes a dwarfish, sickly appearance, like an animal robbed of its food. Now, the farmer, to be a good husbandman, must plant the germ, and place around it all the materials of which it should be composed; then Nature, the handy workman, soon rears the perfect plant.

The question now arises, what those ingredients and materials are. The chemist has given us all the knowledge he has on the subject; the air and the water, the soil and the subsoil, have each a part in their possession, and should each be made to contribute a share. Nature, in the production of a perfect plant, does not restrict herself to the animal, vegetable, or mineral world. The opinion so generally prevalent that the soil, two or three feet below the surface, must consequently be entirely barren and useless, may be, and doubtless is, erroneous in many instances, especially in that called *hard pan*. If, in producing the perfect plant, nineteen may possibly be found in the surface soil, while the twentieth may be found in the subsoil. Instances have occurred where a good dressing from soil ten feet deep, entirely destitute, to all appearance, of vegetable matter, have had equally as good, or the same beneficial effect, as a good dressing of gypsum. This is truly an age of improvement. Many a farmer has found, while others have yet to find, a mine of wealth below the reach of his plough, of which he was as unconscious as the mountain of its ore. It is very reasonable to suppose that the newly-created world was, at first, entirely a mineral mass of matter, from which vegetables soon grew abundantly enough to support all animated nature. Geologists generally suppose the action of the elements, for an indefinite length of time, was necessary to fit it for the abode of plants and animals; but I believe the action of the frost, with the winter's rain and snow, to be a powerful fertilizer in this climate; hence fall ploughing and deep ploughing should go together. — *Selected.*

GEOMETRY APPLIED TO FARMING.

It may appear, at first sight, as if the science of geometry could have but little to do with agriculture; and yet there are few of the ordinary occupations of life in which it is of such general utility. The farmer does not plant a row of corn, or construct a drain, or a road, or even plough his ground, without applying, whether he be conscious of it or not, important mathematical principles. He cannot build a fence, or plan a dwelling, or a barn, without describing mathematical figures; and in doing this he can, by the application of a few of the most obvious principles of geometry, be enabled to save as well time and labor as money. I propose, in this short article, to demonstrate the above fact in such a manner as shall render it plain to all. And first, let us take fencing.

The main object to be sought in building fences is, of course, to enclose the greatest possible quantity of ground in the least possible fence. It may seem a self-evident proposition, that a certain number of rods of fence will enclose a certain number of acres of ground, no matter in what particular form said enclosure may be made; but there cannot be a greater mistake, as I will presently show.

Most of the fields in this country are enclosed in the form of either squares or parallelograms. A parallelogram (I will explain, as every one may not understand the term) is a four-sided, right-angled figure, having two long and two short sides; or, in other words, it is what is known in many parts of our country as an "oblong square." Now, suppose it be required to enclose a field with four hundred rods of fence, in what manner shall it be laid out so the said four hundred rods of fence shall enclose the most ground? If it be laid out in the form of an exact square, each side will be one hundred rods in length, and the field will contain exactly ten thousand square perches, or sixty-two and a half acres. If it be laid out in the form of a parallelogram, having two long sides, each one hundred and fifty rods, and two short sides, each fifty rods, it will still require four hundred rods of fence; but it will contain only seven thousand five hundred perches of land, or about forty-six and three quarter acres; showing the difference in favor of the square to be twenty-five per cent. A large majority of fields in this country are right-angled parallelograms, when squares would have been equally convenient, and a large portion of the labor and materials employed in constructing and keeping up the fences might have been saved. If fences were constructed without reference to other boundaries, as in enclosing a quantity of land on a prairie, the advantages of circles over every other form are still more obvious. For, suppose four hundred rods of fence be built in the form of a circle, it will enclose nearly twelve thousand seven hundred and fifty perches of ground, being two thousand seven hundred and fifty more than the square, and five thousand two hundred and fifty more than the parallelogram.

Hexagonal or six-sided figures, approaching nearer to the form of circles than do squares, offer similar advantages. This is the form in which the bees build their cells, and science shows that in no other form can an *assemblage* of enclosures be made with as little waste of material as in this, thus showing a beautiful coincidence between mathematical knowledge and animal instinct. On most farms circular or hexagonal fields would be impracticable, owing to the shape of the farm; but there are certain small enclosures where these forms are practicable. I have taken the above large enclosures as examples, because in them the advantage of one shape over another is more obvious. In small enclosures the proportion is equally great, though of course not equally glaring.

In enclosing gardens, barn-yards, sheep-folds, &c., the fences of which are usually built without reference to other boundaries, the circle offers advantages over all other forms. For if a certain piece of ground, for a garden or barn-yard, be enclosed with two hundred and forty feet of fence, it will contain, if laid out in a parallelogram, eighty feet on each long side, and forty feet on each short ditto; three thousand two hundred square feet; if laid out in the form of a square, it will be sixty feet on each side, and will contain three thousand six hundred square feet; if it be laid out in a circle, it will contain four thousand five hundred and seventy-nine square feet. This shows the advantages of one form over another very plainly.

The same principle applies to the construction of out-buildings, such as corn-cribs, ice-houses, smoke-houses, or hog-pens, in all of which a large proportion of materials and labor can be saved by adopting the circular or hexagonal form.

Houses and barns have, from time immemorial, been right-angled buildings, and I suppose, according to the immutable laws of custom, must still be built so; but even here, a large amount of materials and money may be saved. I now speak of country houses, where the builder is not obliged to plan his house according to the shape of a contracted town lot. Nine tenths of all farm buildings are in the form of right-angled parallelograms; and in thus erecting them, space is sacrificed without any saving in labor or money. For, suppose a house or barn be built twenty feet front by forty in depth, which is a very common *proportion* for buildings; it will then require one hundred and twenty feet *length* of wall to enclose it, and its floor will contain eight hundred square feet. If it be built in the form of a square, thirty feet on each side, the length of wall required to enclose it will be the same; but its floor will contain nine hundred square feet, being the difference in favor of the square of one hundred feet, which, to the farmer who likes a good roomy threshing-floor, or to the wife who rejoices in a roomy house, is an item of no small importance.

From the above premises, then, we may draw the following conclusions: —

1st. That all large enclosures should be, as nearly as possible, exact squares, not parallelograms or "oblong squares."

2d. That small enclosures, wherever practicable, should be circular, or of some figure approaching the circle as nearly as possible.

3d. That small out-buildings should be circular, and large buildings, where plenty of room is desired, should be square.

4th. By adopting the above forms, a large proportion of time, labor, and materials, and therefore of money, may be saved without any sacrifice of space.

COLA.

NOTE. — In endeavoring to make the above subject plain, I am aware that I have departed from the strictness of mathematical terms somewhat; but the conclusions deducted from the above will, I think, be found mathematically correct. C.

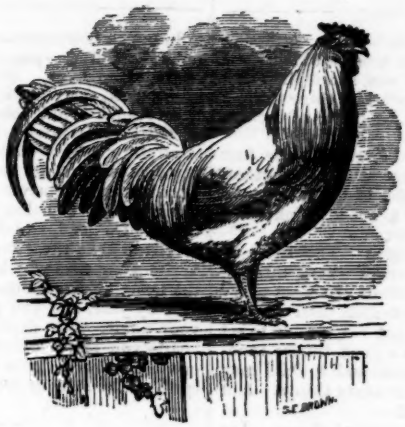
— *Phila. Dollar Newspaper.*

STARCH FROM INDIAN CORN.

The Ohio Statesman informs us that large quantities of starch are made from this grain in that state. An establishment near Columbus is said to use twenty thousand bushels of corn annually for this purpose. No attention is now paid to the color of the corn, as by the improved modes of manufacturing, as light-colored starch is produced from the dark-colored varieties, as from white. The quality of the starch here made is said to be superior, commanding a higher price in New York and New Orleans than that made from wheat. The offal of the grain is fed to hogs; and at the manufactory alluded to, five to six hundred head are annually fattened.

DURABILITY OF RED CEDAR.

We have heard of an old farmer, who, when asked how he knew that cedar posts would "last forever," said he had frequently tried the experiment. Some may doubt his assertion, yet its lasting powers have been found to exceed a long lifetime. At the head of one of the graves in "Old St. Mary's," Md., there stands a cedar slab, which, as the inscription indicates, was placed there in 1747, and is still perfectly sound.



DORKING COCK.

This beautiful engraving is taken from a daguerreotype likeness of one of Dr. Wight's fowls, which are regarded as among the finest in the country. He has long paid great attention to poultry, importing from various countries distinct and pure breeds. His white Dorkings are much admired for their beauty and genuineness. Dr. Wight, by his importations, correct observation in various experiments, and ready communication of valuable information, has done much to promote correct knowledge in regard to this important branch of rural economy.

The following is a copy of Dr. Wight's remarks on the Dorking breed of fowls, as communicated to the author of the American Fowl-Breeder: —

"As you have expressed a wish to have me report my experience in regard to the Dorking breed of fowls, I readily comply with your request.

"After an experience of ten or twelve years, (having been, in that time, the owner of many birds of different breeds,) I do not hesitate to give the Dorkings the preference.

"They have large and plump bodies, with a broad, full chest, like the partridge, and in this peculiarity, hold the rank among poultry which the Durhams do among cattle. When produced at the table, there is no other breed I have yet seen equal to them. They are also good layers, producing a good-sized, clear, white egg, and, as sitters and mothers, cannot be surpassed by any breed of fowls. To obtain the *pure* breed is difficult. Any one who has ever imported them will attest to this fact. No sure criterion is found in the appearance of five toes, as has been stated. But where it is not found, I should apprehend a 'cross.' To describe a true Dorking is difficult, although a breeder could at once recognize one. Many writers state that they are long in the body. But this is only true when they are young. As they come to maturity, the other parts are filled up, and they appear more like the form of the linnet than any other bird. The prominent points are these: A fine head, with brilliant, reddish-tinged eyes; single or double combs, in both sexes; a graceful neck, rather short than long; wide, deep, projecting breast; the body is not only long, but is round, rather than flat or square; and the legs, considering their large size, short, and invariably of a silvery white. They move with an approach to the majestic. Their colors are (those I have imported at various times) both white and speckled; but I preferred to retain the white, and have bred from them. My stock is now entirely white.

"I may add, that, when crossed with larger breeds, they invariably improve the form; and while the quality of the meat is also improved, the amount of offal is much reduced.

"They are a very hardy bird, and their young are easily reared — a fact of great importance in this climate."

PLANTING CHESTNUTS.

At a late farmers' meeting, in New York, Mr. Rice, speaking of planting chestnut timber, remarked, that he ploughed up a tract of unproductive hill side, several years ago, and planted it with chestnuts, in rows four feet apart every way. The first sprouts coming up rather crooked and scrubby, he went over the field and cut them down close to the ground, which caused new shoots to spring up straight and vigorous. The trees are very thrifty, completely shade the ground, and grow more and more rapidly as the soil becomes strengthened by the annual deposit of leaves. So well satisfied is he with the experiment, that he is now placing other worthless lands in a similar course of improvement.

AGRICULTURAL PAPERS.

Every farmer can well afford to take a good agricultural paper, to assist him in the erection of suitable buildings and fences; the making and saving manure; the selection of agricultural implements; the best kinds of stock and fruit; the feeding and fattening of cattle; and management of his land and crops: thus obtaining the united wisdom and experience of the best practical farmers, not only of our own country, but of the civilized world. I have known farmers to lay out, through mismanagement, within the short period of a year, enough to pay for *one hundred* copies of any agricultural paper published in the land. — *North Am. Farmer.*

Domestic Department.

Short Sermon for Parents. — It is said that when the mother of Washington was asked how she had formed the character of her son, she replied that she had early endeavored to teach him three things: obedience, diligence, and truth. No better advice can be given by any parent.

Teach your children to obey. Let it be the first lesson. You can hardly begin too soon. It requires constant care to keep up the habit of obedience, and especially to do it in such a way as not to break down the strength of the child's character.

Teach your child to be diligent. The habit of being always employed is a great safeguard through life, as well as essential to the culture of almost every virtue. Nothing can be more foolish than an idea which parents have, that it is not respectable to set their children to work. Play is a good thing; innocent recreation is an employment, and a child may learn to be diligent in that as in other things. But let them learn early to be useful.

As to truth, it is the one essential thing. Let every thing else be sacrificed rather than that. Without it what dependence can you place in your child? And be sure to do nothing yourself which may countenance any species of prevarication or falsehood. Yet how many parents do teach their children the first lesson of deception!

Preservation of Meat by Freezing. — Every body knows, or ought to know, that meat will keep perfectly sweet so long as it remains frozen. But every body does not know that their meat will be tender or tough, according to the method of thawing it.

If frozen meat is brought into a warm room, and thawed by heat — if you have not good teeth, and the digestive powers of an ostrich, you had best leave that part of the dinner for those who have. Therefore, bring from the larder, the night before it is wanted, the meat or poultry intended for dinner, and plunge it into cold water. The next morning, a thick coating of ice will be found encrusting the whole piece. Take it off, and change the water, and let it remain until the hour for dressing it. If to be boiled, put it over the fire in cold water; if for a roast, put it not before too brisk a fire, as there is always danger that the heart of a large piece may not be completely thawed, in which case it will be spoiled.

Vegetables should be thawed in the same way, and, with few exceptions, they will be better for having been frozen. Potatoes, however, acquire a disagreeable sweetness.

Lemon Pies. — In this year of scarcity of fruit, it may be desirable to know that a good pie can be made simply of lemon and molasses. Press out the juice of a lemon into two teacups full of molasses, grate in the dried peal of another, cover a plate with a layer of crust, spread over some of the mixture, lay on a thin crust, spread another layer of the mixture, and over that lay a top crust; bake thoroughly, and you will have an excellent and wholesome pie. One lemon will make two pies.

Muffins. — Take three pints of flour, one pint of water lukewarm, one teacupful of baker's yeast, one great spoonful of sugar, one teaspoonful of salt; make them up in the morning for tea, or at night for breakfast, and bake them in muffin rings.

Youth's Department.

Live for Something. — Thousands of men breathe, move, and live — pass off the stage of life, and are heard of no more. Why? They did not a particle of good in this world, and none were blessed by them; none could point to them as the instruments of their redemption; not a line they wrote, not a word they spoke, could be recalled; and so they perished; their light went out in darkness, and they were not remembered more than the insects of yesterday. Will you thus live and die? Live for something. Do good, and leave behind you a monument of virtue that the storms of time can never destroy. Write your name by kindness, love, and mercy, on the hearts of the thousands you come in contact with year by year, and you will never be forgotten. No! your name, your deeds will be as legible on the hearts you leave behind, as the stars on the brow of evening. Good deeds will shine as brightly on the earth as the stars of heaven.

The following advice was imparted to the late ex-President Adams, by his mother, in 1778, in a letter to him while he was in Europe: —

"Great learning and superior abilities, should you ever possess them, will be of little value and of small estimation, unless virtue, honor, integrity, and truth, are cherished by you. Adhere to the rules and principles early instilled in your mind, and remember that you are responsible to your God. Dear as you are to me, I would much rather that you would find a grave in the ocean which you have crossed, than to see you an immoral, graceless child."

Health Department

Hints on Diet. — "*An ounce of prevention is better than a pound of cure.*" A reasonable indulgence in the abundant supplies of nature, converted by art to the purposes of wholesome food, is one of the comforts added to the maintenance of life. It is an indiscriminate gratification of our tastes, regardless of the consequences that may ensue from it, that is alone blamable. But so great is our general apathy in these respects, that even on the occurrence of diseases, from which we are all more or less sufferers, we scarcely ever reflect on our diet, as the principal, if not the sole cause of them; we assign them to weather, to infection, to hereditary descent, to spontaneous breeding — as if a disease could originate without a cause — or to any frivolous, imaginary source, without suspecting, or being willing to own, mismanagement of ourselves?

We derive the renewal of our blood and juices, which are constantly exhausting, from the substances we take as food. As our food, therefore, is proper or improper, too much or too little, so will our juices be good or bad, overcharged or deficient, and our state of health accordingly good or diseased.

By aliment, or food, is to be understood whatever we eat or drink, including seasonings, such as salt, sugar, spices, vinegar, &c. — every thing, in short, which we receive into our stomachs. Our food, therefore, consists not only of such particles as are proper for the nourishment and support of the human body, but likewise contains certain active principles, viz., oils and spirits, which have the properties of stimulating the solids, quickening the circulation, and making the fluids thinner; thus rendering them

more suited to undergo the necessary secretions of the body.

The art of preserving health and obtaining long life, consists in the use of a moderate quantity of such diet, as shall neither increase the salts and oils so as to produce disease, nor diminish them, so as to suffer the solids to become relaxed.

It is very difficult, almost impossible, to ascertain what are the predominant qualities either in our bodies or in the food we eat. In practice, therefore, we can have no other rule but observing by experience what it is that hurts or does us good, and what it is our stomachs can digest with facility, or the contrary.

The eating too little is hurtful, as well as eating too much. Neither excess, nor any thing else that passes the bounds of nature, can be good to man.

By loading the stomach, fermentation is checked, and of course digestion impeded; for the natural juice of the stomach has not room to exert itself, and it therefore nauseates its contents, is troubled with eructations, the spirits are oppressed, obstructions ensue, and fever is the consequence. Besides that, when thus overfilled, the stomach presses on the diaphragm, prevents the proper play of the lungs, and occasions uneasiness in our breathing. Hence arise various ill symptoms and depraved effects, enervating the strength, decaying the senses, hastening old age, and shortening life. Though these effects are not immediately perceived, yet they are certain effects of intemperance: for it has been generally observed in great eaters, that though from custom, a state of youth, and a strong constitution, they have no present inconvenience, but have digested their food, suffered surfeit, and borne their immodcrate diet well, if they have not been unexpectedly cut off, they have found the symptoms of old age come on early in life, attended with pains and innumerable disorders.

If we value our health, we must ever make it a rule not to eat to satiety or fulness, but desist while the stomach feels quite easy. Thus we shall be refreshed, light, and cheerful; not dull, heavy, or indisposed. Should we be tempted to eat too much at one time, we should eat the less at another. Thus, if our dinner has been larger than usual, let our supper be less, or rather, quite omitted; for there is no man, however careful of his health, who does not occasionally transgress in this way. — *Selected.*

Mechanics' Department, Arts, &c.

Purifying Feathers. — The London Journal gives the following process by which feathers may be purified: —

The feathers are first placed in what is termed a steam-cistern — a chamber of iron, having its floor formed of perforated metal, through which a current of air is made to enter with considerable force, to fill every portion of the cistern, and thoroughly saturate the mass which it contains. This continues for some time, the effect upon the feathers being analogous to that produced on metallic substances when exposed to the red heat of a furnace. Every particle of animal matter they contain is fused and driven off, being carried away by the steam as it rushes through the mass and escapes by an aperture for the purpose in the roof of the cistern. The feathers, now of course in a damp state, are next placed in a large, hollow cylinder of iron, into which, by means of a blowing machine, is carried a rapid current of air, heated by a furnace to a temperature of three hundred degrees. This, like the first cylinder, contains a revolving instrument of iron, but having arms, or bars of iron; and these, driven at a great velocity, passing through and through the mass, thoroughly separate it, and keep the feathers constantly in motion; thus allowing the current of hot and drying air to penetrate them freely, and effectually separating every fibre of them, while through a floor of wire work passes away a large quantity of dust and refuse, which must be disengaged. Lastly, the feathers are placed in a hollow cylinder of perforated metal, in which revolves a "fan," composed of four plates of metal, fixed at equal distances from each other, into a horizontal bar. This is driven with immense velocity, making about nine hundred revolutions in a minute, and carrying round the feathers with it, the dust not already removed in the drying cylinder is separated by the powerful current of air which is driven through them, and passing the perforations of the cylinder, is carried away by a drain beneath. By this means the feathers are rendered perfectly sweet, pure, and dry.

Cast Iron Furniture. — Our exchange papers are continually bringing to our notice some new article of furniture, or implement used in husbandry, or in the arts, which is now made of cast iron. Hat racks, an indispensable requisite for the halls of genteel residences, have been, until lately, constructed entirely of wood; elegant ones are now made of cast iron. Wood has heretofore been the only material used in the construction of bedsteads; elegant ones, and cheap ones too, are now made of cast iron. Fence posts and the connecting rails are cast almost or quite as cheap as they can be split from the tree; and sheet iron will make the slats for a picket fence! Good cast iron bedsteads are furnished in our eastern cities for $15 to $20 each.

From the Transactions of the Essex Agricultural Society.

DAIRY MANAGEMENT.

[concluded from page 39.]

A neighbor's statement.

The following letter, from a son of Essex, whose dairy products, the present season, have commanded the first premium in a neighboring county, will commend itself to favor — although the diffidence of the author will not suffer his name to be used: —

My dear Sir: I have twelve cows, mostly of the common native stock. There are among them, however, *twins*, said by the late Elias Phinney, Esq., to be of the Swinley, Ayrshire breed, and one of the North Devon breed. Three are old cows, two are heifers, one of which is just three years old, and has raised one calf last year, and one this; the other is two years old, and made, the second week in September, five and a half pounds of butter. These heifers were raised upon my own farm. The first was taken from the cow when five weeks old, and fed immediately upon hay and water, without ever being taught to drink milk, or in any way changing her food, except by the addition of roots occasionally, until the next summer, when she was sent to pasture. Her first calf was dropped when she was twenty-two months old. The other heifer was taken from the cow when five weeks old, and sent immediately to pasture. The calves of both are now in pasture, and promise well under similar treatment.

From the 20th of May to the 10th of August, six cows were pastured at home and milked. One of these calved early in December, and one in January last. Since that time, three more have been added to the number kept at home, and three remain dry, at pasture, away from home. They all have good pasture, and an ample supply of running water.

In June, from the milk of six cows, we made one hundred and ninety-eight pounds of butter. In July, the severe drought had nearly destroyed the feed, and the quantity of butter was diminished. During the autumn, the feed has been very good, and we have had the milk of nine cows, and from the whole we have made, since the 23d of May, one thousand and nineteen pounds of butter. The number of persons in my family has never been less than fourteen, and for many weeks during the summer, it has been eighteen; and we have used milk and cream at all times freely.

Our milk is strained into tin pans, and allowed to stand from thirty-six to forty-eight hours, in a cool, darkened room on the first floor of the house; except in August, when it is kept in a cellar, under a wing of the house. The cream is taken off into tin pails; is salted a little, and stirred every day.

We churn twice each week during the summer. Before churning, the cream stands upon ice for twelve hours or more. After churning, the buttermilk is thoroughly worked out by the hand, and the butter is salted to suit the taste. The day following, the butter is worked over again, and prepared for the market.

In laying down butter for the winter, we use stone jars. After packing it down very closely, we sprinkle salt and loaf sugar between each layer of butter. In this way our butter has kept perfectly sweet through the season.

It should be mentioned, that during parts of July and August, the cows that were milked had, in addition to the pasture, green corn fodder, or, in the place of that, Indian meal and shorts, equally mixed, in proportion of two quarts to each cow daily. And the same quantity of the same grain has been given to them during the last half of September, and of October.

The management of the dairy has, in consequence of the sickness of my wife, been wholly confided to my daughter the present year. Previously, she had had no particular training for this branch of housewifery. She engaged in it with alacrity, and her own health has been benefited by the occupation.

You will, I trust, pardon the suggestion to one holding your *official* position, that it should be made a special object of our agricultural societies to interest and awaken the attention of the female part of the community — perhaps, by associating ladies in the examination of such articles as they are best competent to judge of, and by making the exibition of such articles a distinct department of the annual fair; or, perhaps, by offering a premium for the rearing of fowls, the cultivation of flowers, vegetables, or fruit trees, or the keeping of bees, and such like. The dairy, needlework, knitting, &c., belong of course to them. But I would bring them into more active employment in the open air. One of the best conducted dairy establishments in this town, where five or six cows are kept, is *wholly* taken care of by two females, a widow and her daughter. Mothers have much to do with the training of their sons to a love of, and an intelligent preparation for, a farmer's life. It is from their interest in, and their skilful management of, the labors which belong chiefly to them, upon a farm, that their sons learn to love, and to practise with success, the business of farming.

I have cheerfully complied with your request, in making these suggestions, and hope that you, by embracing the facts in some communication of your own, may lead others *to do better* than I have done.

October 30, 1849.

Remarks. — Having witnessed, in the month of June, the skilful management of the dairy referred to in the foregoing letter, and being impressed with the importance of encouraging *young ladies* to do what their mothers alone have been accustomed to do, that they themselves, when their turn comes, may be qualified to go ahead, I solicited this communication. It adds much to the facts before stated. Particularly it shows, to some extent, at least, what may be expected of the *Ayrshires* and *Devons*. I saw the animals, and have no doubt of the correctness of Mr. Phinney's opinion. I wish he could have lived to have done them justice. I was struck with the appearance of the young stock, on this farm, and have no doubt that the good sense of my friend who manages it, although he came into the field at the *eleventh hour*, will demonstrate that he nobly earns his reward. His suggestions, as to the expediency of encouraging females to come forward and take parts in our exhibitions, are worthy of regard. Universally they are admitted to constitute the *better half* of society; why should they not then have an equal chance to show themselves, and the work of their hands? Is there any one whose delicacy would be offended by such a sight? Let such remain at home. It would be a pity to expose nerves so nicely tuned. Ten chances to one, that the *fastidiousness*, that would object to a female taking part in an Agricultural Exhibition, would often be found appurtenant to that class of *personages* who are said "to strain at a *gnat*, and swallow a *camel*."

The *buffalo*, or *hornless cows*, spoken of in Statement No. 1, by Mr. Stone, are there considered as *natives*. This is not strictly correct. I hope to be able to give a more distinct account of this class of animals on a subsequent page. J. W. P.

BEEHIVES — VENTILATION — A MILLER TRAP.

Friend Bateham — I saw an inquiry in your paper concerning the best mode of the treatment of bees. As I have paid considerable attention to this subject, in order to ascertain the laws and regulations by which bees are governed, I feel somewhat qualified to state several facts connected with the subject.

With my present knowledge upon the subject, I would advise all to make small hives, either of boards or hollow trees, holding about three pecks each, and about sixteen inches high. I prefer a hollow log burned out and trimmed to a feather edge at the bottom, so as to fit close on the bench with two or three notches for the passage of the bees as usual.

Bore a two-inch hole through the top of the hive, and also one in the bench on which the hive is to stand. Take some wire finely woven, that a miller or bee cannot pass through it; bind it round so as to form a tube the whole length of the hive two inches in diameter. Fasten one end of this tube under the bottom of the bench, and the other on the top of the hive. Put a wire covering under the lower end of this ventilation, and over the top of it fasten a small box one inch high and four inches square, with a fine wire bottom. The box should be of wood, one eighth of an inch thick, and on two opposite sides of it should be several holes just large enough to admit bees. Above these holes, on the inside of the box, should be tacked small strips of silk gauze to hang over the holes like curtains. This fixture I call a perfect miller trap — it will catch every miller that attempts to get in the hive.

The above described ventilation serves to give the bees a plentiful supply of fresh air, which they so much need in warm weather. This is manifest by the great exertions used by the bees to supply the hive with air, when they sit on the bench, and buzz about the mouth of the hive, fanning the young bees, to prevent suffocation.

This tube through the middle of the hive, serves to convey the breath of the bees off; this, together

with the smell of honey passing into the miller trap, draws the millers, with a perfect rush, into that bourne whence no traveller returns.

Should this be acceptable to the editor, I am willing to state the cause of bees dying and leaving honey; and the cause of bees killing their drones; and also how wax is made, and of what material, and for what purpose the bee bread is used.

Yours respectfully,

E. B. CREW.

SHORT CREEK, HARRISON COUNTY, OHIO, 1849.

REMARKS. — We shall be pleased to hear further from friend Crew, on the subjects proposed. We must say, however, that his "miller trap" does not strike us favorably, if we rightly understand its construction; for we think the millers will find it a very convenient entrance, through which they, or their progeny, the worms, can find access to the honey. It is of little consequence whether the moths escape or not, after they have deposited their eggs where they can do mischief. ED. — *Ohio Cultivator.*

THE POTATO ROT.

Dr. Richardson, of Maryland, flatters himself that he has discovered the cause of the potato rot, as appears in the following communication to the agricultural committee of the Maryland State Agricultural Society, which is published in the American Farmer for November:

BALTIMORE COUNTY, *Oct.* 10, 1849.

GENTLEMEN: After three years' constant attention to the subject, I flatter myself I have discovered the cause of the *potato rot.* The rot is produced by the deposition of the egg, and the destruction of the pith or heart of the vine, (by consequence, the circulating capillaries,) by the larva of an insect. This insect is of the curculio or weevil genus: as there are many species of the curculio in this state, for distinction I have called this the *curculio magna.* The first deposition of the egg is from the 5th to the 10th of June. (This accounts at once for the acknowledged fact, that very early planted potatoes suffer little with rot, if they do not altogether escape it — and why? Simply because they have got their growth before the vine is poisoned by the insect.)

I have seen no eggs deposited later than the 20th August; ten days after the egg is deposited it hatches; the larva is then very small. The egg is generally placed in the vine about 10 or 15 inches from the root. The larva always eats downward, but seldom goes below the surface of the earth: it feeds for four or five weeks; it then ceases to eat, and, if I may use the term, cocoons, and undergoes its metamorphosis. The larva is about a line and a half in length, perfectly white, with a brown head: it completes its change in about three weeks. If this is early in the season, it leaves the vine, mates, and deposits its eggs; if late in the season, it remains quiescent in the stalk; it, as all the other varieties of curculio, hibernates in the ground. I this day had the honor of exhibiting to the agricultural committee the potato in the different stages of the rot, both incipient and perfect — the diseased capillaries in the vine and in the tubes — the destruction in the vine by the course of the larva — its exuvia, as also the curculio, in its perfect state. I regret that from the impossibility of preserving the specimens of the green vine, I was unable to show the commencement of the disease, 24 hours after deposition of the egg, extending in 48 hours from the wounded part, by the capillaries to the corresponding capillaries in tubes — as also the continuance of the disease — although the egg had been destroyed by preparatory insects of the order Neuroptera, within 24 hours after its deposit. There have been in Ireland, independent of the misery and disease, 250,000 deaths from the potato rot: in this country, a loss of many million bushels. The estimated product in the United States is 114,000,000 bushels; the average loss, since this disease has occurred, is about one third: how important, then, to discover the cause of this immense loss, and a remedy for the evil! That there is a remedy attainable, I have no doubt, from many data in my possession — still, as it would require a large outlay of money, and much time spent in examination and experiments, no prudent person would be justifiable, without aid, in making the necessary inquiry. CHARLES RICHARDSON.

The next thing is, to find a preventive. This may be as difficult as to save wheat from the ravages of the weevil. It is hoped Dr. Richardson will be enabled to go on with his experiments, by having the requisite funds supplied.

COMPARATIVE ESTIMATE OF DIFFERENT KINDS OF CATTLE FEED.

Hay is the food for cattle during winter. If they can get good hay enough during the cold season, they do very well. It is not always that the farmer has a sufficiency of this for his stock, and hence it is useful to know the *comparative* value of other articles which may be used as substitutes for it. It is also more agreeable, and we think more profitable, to mingle other articles with hay. We have prepared from various sources the following table:

Taking good hay as the standard, 100 lbs. of hay equal

276 lbs. Carrots;
300 " Ruta Baga;
317 " Mangold Wurtzel;
201 " Potatoes;
494 " common Turnips.

By calculating 60 lbs. for a bushel of any of the above roots, it will be seen that one ton of hay equals

91 bushels of Carrots;
100 " Ruta Baga;
106 " Mangold Wurtzel;
67 " Potatoes;
165 " Turnips.

From this it will be seen how much fodder you get of each, per acre, compared with good hay.

In regard to straw, experiments have established the following estimate as very near the truth. 100 lbs. of hay equal

272 lbs. new Wheat Straw;
166 " Barley Straw;
169 " Pea Straw;
94 " Clover Hay.

— *Maine Farmer.*

GOOD TOOLS.

MR. EDITOR: I think that the old adage, that "He must indeed be a good workman who can afford to work with poor tools," is one which embodies an important truth. If we farmers employ a mechanic — a mason or a house carpenter, for instance — to execute a "job of work," we of course expect that he will come provided with proper and efficient tools. Should he come with but half the implements requisite for the proper and successful performance of the work confided to his hands, we should not hesitate to demur, and should be perfectly justified in dismissing him and procuring another in his stead. But how is it on our farms? Are we always as jealous and watchful of our interests there? How often, indeed, is it, that our "helps" are required to plough, to mow, to reap and hoe, with implements which are not only "out of fashion," but too clumsy and

ill adapted to the work required to be performed, to be used any where, except in places and under circumstances where those better adapted and constructed cannot be obtained. Many of the old-fashioned implements are still in use on our farms — particularly ploughs, dung-forks, and hoes; and with these unwieldy and almost *unwieldable* abortions, hired men and boys are frequently required to perform as much work, and to finish it off as neatly, as though they were provided with the most proper tools. Farmers generally are too remiss on this point. They are too apt to look at the *cost of the tools*, not at the useless expenditure of strength on the part of the operative in wielding them — *that* is no business of theirs, they think; but this is a fallacy. I have seen men in the hay-field, sweating and blowing, and, like fat John Falstaff,

"Larding the lean earth,"

exerting to the utmost every muscle, to satisfy the expectations and realize the demands, often exorbitant, of a parsimonious employer, who, with good tools, would have performed twice the amount of labor in the same period, without exhaustion and with comparative ease. The work also would have been done *effectually*, which is a matter of prime importance, though, by many, too often neglected and overlooked. The present abundance and cheapness of farming tools, of good quality, render it easy for every one who is so disposed, to obviate this great and long-existing evil.

A PRACTICAL FARMER.

Bold Eagle Farm, *Dec.* 12, 1849.

— *Germantown Telegraph.*

SUGAR MAKING — SHEET IRON EVAPORATORS.

Mr. Bateham: Many of the readers of the Ohio Cultivator depend on making their family supply of sugar from the Sugar Maple Tree, (Acer Saccharinum,) and in the process of manufacture they continue to use the cast iron kettle for boiling down or evaporating the sap, apparently not knowing that there is a better way. I will therefore give a description of the construction and use of the sheet iron evaporator, which is cheaper and better: it is much quicker and easier heated, with less cost of fuel in boiling, and does not crust or burn around the top to the injury of the sugar, as is the case with the cast iron kettle.

Construction. — The size of the evaporators is four or five feet long, two and a half feet wide, and nine inches deep; the bottom and ends of good, heavy sheet iron, and the sides one and a half inch plank. The sheet iron must be as much longer than the vessel as twice its depth, (eighteen inches,) so as to turn up and form the two ends, as high as the plank sides. The iron should be as thick as can be easily pierced with a steel punch. Let the bottom corners of the plank be a little rounded, to suit the bend of the iron. Now turn the planks bottom edge upwards, and place a strip of slippery elm bark on the edge to make a more perfect joint, then nail on the sheet iron firmly, as a shoemaker pegs on the sole of a shoe — punching the holes about one inch apart, within half an inch of each edge of the plank, alternately.

These evaporators should be placed on arches made of brick, and put away in a dry place as soon as done using. With ordinary careful usage, so as to avoid burning and rusting, they will be found very durable. Respectfully, &c.,

WILLIAM WILLIAMS.

Genoa, Delaware Co., Ohio, *Dec.* 1849.

— *Ohio Cultivator.*

BARTLETT'S DOUBLE PLOUGH.

The sound practical judgment and eminent success with which the farming operations of Senator Webster have been carried on, at his place in Marshfield, have become proverbial, and as a consequence thereof, his opinions in relation to practical agricultural matters are entitled to great consideration. It therefore gives us pleasure to find, by the letter we copy below, that his opinion coincides with that which we have heretofore expressed, in relation to an implement, the introduction of which is destined to fix an era in the progress of American Agriculture. — *Mass. Spy.*

Letter from Hon. Daniel Webster, on the Double Plough.

Marshfield, *Dec.* 8, 1849.

William O. Bartlett, Esq.: *Dear Sir* — In June last, an experiment was tried on this farm with one of your Double Ploughs, on a piece of land intended for turnips, somewhat rocky, with a hard sward, not having been ploughed for many years, and many bunches of bushes growing upon it.

The plough appeared to work well, and Mr. Wright, who has been our principal farmer for many years, was greatly pleased with it. The furrows were as well laid, as I thought, as they could have been by any single plough.

Mr. Taylor, who lives on my farm in New Hampshire, wishes me to send him a Double Plough. His land is level, rather a rich loam, and entirely free from stones. He thinks that with a Double Plough and a pair of horses, with a light hand to hold, he could quite easily plough three acres a day, for many days in succession.

It struck me, when seeing the plough in operation, that one part steadied the other, and made the work smooth and even. The saving of labor, in the use of the Double Plough, is too apparent to need remark.

I might add, that my turnips were never more cheaply cultivated, and never yielded so good a crop.

With much respect,

Your ob't servant,

DANIEL WEBSTER.

BONES AND ACID.

To those who dissolve bones in sulphuric acid, I beg to communicate a method I have now, for the second season, adopted with success, whereby I make very short work of an otherwise troublesome job. Under cover, either in a manure barn or cart shed, I make a clay basin, or trough, twenty feet by ten, with edges twenty inches wide and as high, into which, having previously thrown one hundred bushels of half inch bones, and having damped them, I pour from the carboys seventeen hundred pounds of acid, the contents of each carboy being marked by the maker, I have not the trouble of weighing. As soon as the requisite quantity of acid is poured into the trough, two men, with common iron road scrapers, or long iron rakes, commence stirring, continuing so to do until effervescence subsides, two hours completing the work. I leave the mass for ten days, when, by the addition of sufficient water, I bring the whole to the consistence of a thick gruel, cinder dust being then added, as usual. — *Plough, Loom, and Anvil.*

Pithy Hints. — Snuff on the necks and backs of calves and young cattle, will do more good than in the nose of any maiden lady or dandy bachelor; and brimstone, bought for the hogs, will not prove that the itch has got into the house. Cards on the cattle make them look as much better as children with their hair combed. A clean barn is a hint to the woman who takes care of the kitchen. Good milking stools save much washing in the house. A scraper on the door-step saves brooms and dust.

How to Cure a "Wind Sucker." — Wind sucking is a habit (like chewing tobacco) much easier acquired than forgotten. It can only be practised, however, under favorable circumstances; that is, when there is some object on which the horse can rest his teeth, located about as high as his breast — such as a common manger, for instance. The best remedy, therefore, is to place the manger or feeding trough as *low* as the ground or floor of the stable, and the hay-rack as *high* as the horse can reach, and see that there is no object of an intermediate height for him to rest his teeth upon to suck wind. Care must also be taken, that, when out of the stable, he is not allowed to stand near a fence or stump, or any object of convenient height for practising this habit. In the course of a few months, say five or six, he will forget the trick.

Another Remedy. — Tie a cord around the neck of the horse, sufficiently tight to prevent him from enlarging the throat, as is done in wind sucking, but not so tight as to obstruct breathing or swallowing. A tight halter, with throat-strap, will answer this purpose. It will need to be worn for two or three months. This remedy is easy, and I have found it quite effectual. — *Ohio Cultivator.*

Potato Rot in Iowa. — Messrs. Editors: We have had for the last six weeks remarkably pleasant weather, with scarcely any frost. Corn is principally gathered, and had good seed been planted, there would have been an average crop, or more; but as it is, some have not half a crop. Potatoes have all got the rot: there is not one in twenty but what is affected. They commence rotting, this year, at the outside, and the middle continue sound for some time. Last year the affected potatoes rotted away as quick as if they had been frozen; this year, they show no signs of rot until they are cut. — *Prairie Farmer.*

Planting Forest Trees. — Very little has been done in this county about planting forest trees, until recently, and I am happy to know that enterprising gentlemen are now making experiments by planting groves of many kinds of our native as well as foreign varieties. On most of the farms in our county, there are patches of waste land that might be profitably appropriated to the growing of wood, and by planting trees on the sides of our highways, much valuable wood might be raised, our thoroughfares ornamented, and the public benefited. — *Hon. A. T. Newhall's Address.*

Weeds. — The greatest deficiency of good husbandry of our fields of grain and vegetables, is in permitting the weeds to grow and seed the latter part of the season. The great length of time required to harvest and secure fodder for our cattle during our long winters, and which generally employs all hands in the hay-field, permits the weeds to get ahead of the hoe and cultivator, and assert the supremacy, so that many will be discouraged, and give up the contest. — *Ibid.*

Wool in Michigan. — Michigan has gone into the growing of wool at a rapid rate, and is destined to keep increasing. Last year, the surplus that was exported was over 1,200,000 lbs., and the small establishments scattered throughout the state, are estimated to have consumed 600,000 pounds more. This season, the amount exported will not fall short of 1,600,000 lbs; and at the same ratio, another year it will reach 2,000,000 lbs. — *Detroit Tribune.*

NOTICES OF PUBLICATIONS.

The American Poultry Yard; comprising the Origin, History, and Description of the different breeds of Domestic Poultry; with complete directions for their breeding, crossing, rearing, fattening, and preparation for the market; including directions for caponizing, treatment of diseases, &c.; illustrated with numerous engravings. By D. J. Brown, author of the Silva Americana. With an Appendix, embracing the comparative merits of the different breeds of Fowls. By Samuel Allen. 324 pages, large 12mo. Published by C. M. Saxton, 121 Fulton Street, New York.

This is an elaborate work, of great interest and ability. The author has gone into his various subjects ably and thoroughly, showing deep research and wise discrimination. His style is pleasant and happy. We commend this work to all poulterers and farmers who would go into a thorough investigation of the subject.

The Family Visitor; a Literary, Scientific, Agricultural, Horticultural, and Miscellaneous Paper, in quarto form, published weekly, at Cleveland, Ohio. Edited by Professors Kirtland and St. John, and General Knapp, proprietors.

This work, as might be expected from the reputation of the editors, is very ably conducted, and of a character decidedly useful as well as interesting. It is neatly executed, and is illustrated with numerous engravings. A peculiar and valuable feature is the "geological features, minerals, birds, fishes, insects, &c., of Ohio and the surrounding states." This is among the most valuable journals on our exchange list. It would be a welcome and instructive *Visitor* in families in all parts of the country. The judicious editors discard fiction, which constitutes a prominent feature and a corrupting influence in many of the miscellaneous periodicals of the day.

The Philosophy of Special Providences. Andrew J. Davis. Published by Bela Marsh, 25 Cornhill. Pamphlet, 56 pages, 8mo.; 15 cents.

Proceedings of the North American Pomological Convention, held at Syracuse, Sept. 14th, 1849. We shall give a notice of these doings by and by.

Report of the Ohio Nurserymen and Fruit-Growers' Convention, third session, held at Columbus, Dec. 5th, 1849. We shall give a review of this work in a short time.

Address by Prof. Johnston, before the Annual Exhibition of the N. Y. S. A. Society, Sept., 1849. We shall publish some valuable extracts from this address.

Pauper Abstract, containing an abstract of the returns of the Overseers of the Poor in Massachusetts.

Transactions of Plymouth Agricultural Society, from Rev. Morrill Allen.

Address by W. C. Goldthwait, before Hampden Agricultural Society, on the application of science to farming. This will doubtless claim further attention on perusal.

ACKNOWLEDGMENTS.

About two months since, we received eleven kinds of apples of Mr. Zeno C. Taber, East Montpelier, Vt., for the names, if known here, and opinions as to their quality. We have waited for their maturity, and tried them. We do not recognize any of them as identical with kinds generally cultivated, or known to the public, excepting No. 2, which appears to be a kind considerably cultivated in Pomfret and Hartford, Vt., and in some parts of New Hampshire. It is of fair appearance, and tolerably good quality, and noted for productiveness. As we had but a single specimen of a kind, it is impossible to give a correct opinion of this fruit. In such cases it would be better to send only a few kinds, and such as the cultivator regards as the best, and send more of a kind. When we have only one or a very few specimens of a kind, it is difficult to fix on the right period to try them; and as we value our opinion, founded on so narrow observation, very lightly, we would not give it to the public as entitled to importance. No. 5 appeared to be a very good fruit, the best of the lot in quality. Nos. 1, 4, 7, and 9, were of medial quality.

Peaknose Apples. — Herman Vincent, Esq., representative from Chilmark, Martha's Vineyard, has furnished us with some specimens of this apple. It is of good size, handsome appearance, and good quality. He remarks, that it is a good grower and great bearer, and is a popular apple on that island, where it flourishes remarkably well, being well adapted to the sea-coast.

Winter Pippin. — We have some of these apples from Mr. J. M. Ketchum, Brandon, Vt. The fruit is large, rather oblong, tapering considerably to the eye; of a straw color, with an occasional blush in the sun, and dark specks. The quality is only medial; it appears to be tolerably good for cooking, but it lacks character for a table fruit. Mr. K. remarks, that this variety, in that region, produces more fair fruit than any other kind cultivated there, as it is a great grower and an enormous bearer, and the fruit is large and fair. He brought a large lot of this fruit to this market, and sold it at high prices.

A Prolific Sow. — Mr. Thomas Page, Waltham, has a sow that has within the year produced thirty-eight pigs. He has sold $50 worth, and has ten pigs remaining, some of which he has engaged at $2,50 each. He bought this kind at Brighton, and he says that his neighbors call them the *Berkshire* breed.

Cooking Food for Swine. — Dr. Lee, in an article on pork-making, says, "From some experiments of my own, and considerable research into the published results of the experience of others, I am satisfied that ten bushels of boiled potatoes thoroughly mixed with the pudding that can be made from three bushels of corn or peas, will make as much pork as twenty bushels of potatoes, and six bushels of corn or peas fed raw."

A KIND WORD.

A little word in kindness spoken,
  A motion or a tear,
Has often healed the heart that's broken,
  And made a friend sincere.

A word — a look — has crushed to earth
  Full many a budding flower,
Which, had a smile but owned its birth,
  Would bless life's darkest hour.

Then deem it not an idle thing,
  A pleasant word to speak;
The face you wear, the thoughts you bring,
  A heart may heal or break.

THE OLIO.

Two gentlemen, at a public table, got into a vehement dispute upon a subject which it was quite evident that both were profoundly ignorant of. A big bull dog, which had been sleeping on the hearth, became roused by their violence, and began barking furiously. An old gentleman, who had been quietly listening to the disputants, gave the dog a kick, and exclaimed, "Hold your tongue, you brute; you know no more about it than they do."

Sign of Character. — A man who habitually speaks disparagingly of the female character, gives conclusive evidence that there is something wrong in his own. A true man always has a high idea of female excellence, and cherishes it with a respect bordering on worship.

"It is an inexpressible comfort," said the dying Campbell, the poet, "to be able to look back and feel that I have not written one line against religion or virtue." How many would, in his situation, give worlds to see and feel as Campbell did!

A young man, feeling restless in church, leaned forward and addressed an old gentleman thus, "Pray, sir, can you tell me a rule without an exception?" "Yes, sir," he replied; "a *gentleman* always behaves well in church."

Nothing is more impressive than mystery; even "Junius," himself, as an author, would have been forgotten long ago, if people had known whom to forget.

The phrase, "Hold your tongue," is of Bible origin. Wonder how many of our readers can point to the chapter and verse.

A year of pleasure passes like a floating breeze; but a moment of misfortune seems an age of pain.

Why is an infant like a diamond? Because it is a "*dear little thing.*"

TERMS. — The New England Farmer is published every other Saturday, making a neat and handsome volume, at the close of the year, of 416 pages, at $1 a year, or five copies for $4, payable in advance. It may be elegantly bound in muslin, embossed and gilt, at 25 cents a volume, if left at this office. As it is stereotyped, back numbers can be furnished to new subscribers.

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